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OPINION OF OHIO DAIRY FARMERS ON CURRENT ISSUES FACING THE DAIRY INDUSTRY

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The present program used to support milk prices has drawn considerable criticism during the past year. This criticism has primarily been directed at the high cost of the program--approximately 1.3 billion dollars in 1980. But the price support program is only one of many issues facing the dairy industry as the 1980's dawn. Other issues include the import of dairy products, the future role of cooperatives, and the future role of marketing orders. In an attempt to gauge dairy farmers' opinions on these issues a survey was mailed to 540 Ohio dairy farmers in mid-November 1980. Results of the survey and the methodology employed in constructing it are discussed in this article.

Survey Structure and Responses

The sample of 540 Ohio dairy farmers was drawn on a stratified basis with the stratification based on the number of cows on the farm (Table 1). While each strata was sampled randomly, the rate of sampling varied by strata. The larger herds were sampled at a higher rate. This reflected the fact that the survey of opinions was attached to a monthly milk production survey. Since most milk is produced by large dairy farms, the monthly milk production survey was constructed so that the larger herds were sampled at higher rates.

It should be noted that the sampling rate for the first three strata is somewhat below the optimum rate. Thus, confidence in the resulting responses for these strata is somewhat lower than for the other strata. It is unlikely that this sampling error would change the results, but it should

nevertheless be kept in mind when interpreting the results presented on a dairy farm size basis. In addition, the sub-optimal sampling of the smaller strata has little impact upon the accuracy of the state totals.

Of the 540 questionnaires mailed out, 246 were returned and all were useable. The response by strata is presented in Table 1. As commonly occurs, the response rate was much lower for the smaller size categories.

To obtain population estimates, each strata was assigned a weight. In other words, all returned questionnaires for a given strata were expanded by a numeric factor. For each strata, that factor was determined by dividing the population of the strata universe by the number of returned questionnaires for that strata. Thus, the distribution on the number of cows for the weighted sample exactly duplicated the population distribution. The population distribution is also included in Table 1. The average number of cows on the 12,600 Ohio dairy farms equal approximately 30.

Characteristics of the Sample

The distribution of sampled dairy farmers over age categories corresponded very closely with the 1974 Census of Agriculture's distribution. This fact suggests a close approximation of the sample to the universe and enhances confidence in its results. Specifically, 11 percent of the sampled dairy farmers were under 30; 19 percent were between 30 and 39; 16 percent were between 40 and 49; 31 percent were between 50 and 59; and 24 percent were over 60.

It is interesting to note that little correlation existed between age and size of herd. Thus, it can be concluded that retirement of the older farmers will not necessarily increase herd size.

Over 80 percent of the surveyed Ohio dairy farmers earned more than 50 percent of their income from dairying. In addition, only 11 percent of the

TABLE 1: Sample Size and Sample Stratification of Ohio Dairy Farmers, November, 1980.

Number of Cows	Population	Sample	Returned Questionnaires
1-9	2360	40	12
10-19	3170	59	19
20-29	2530	56	28
30-49	2430	141	67
50-99	1830	172	88
100-199	250	59	27
200 +	30	13	5
TOTAL	12,600	540	246

Source: Ohio Crop Reporting Board and survey results

respondents indicated that more than 25 percent of total family income was earned off the farm. Therefore, the surveyed dairy farmers earned most of their family income from their dairy operations. This conclusion is hardly surprising given the labor intensiveness of milking operations.

The last general characteristic to be highlighted is membership in Milk Marketing, Inc. This cooperative covers all of Ohio and parts of surrounding states. Over 50 percent of the respondents indicated that they were members (Table 2). Ten percent had been a member at one time but were not a member at present. In contrast, 39 percent indicated that they had never been members.

To further examine this membership question, responses were broken down by the number of cows on a farm. As can be readily seen, never members are heavily concentrated in the smallest two strata. These two strata also exhibit a high withdrawal rate (percent member at one time/percent current member). These facts coincide with the traditional beliefs that small farmers avoid organizations. In addition, the small farmers are most likely Grade B milk producers while the cooperative primarily represents Grade A producers.

The withdrawal rate is larger for the two largest categories of milk cows than for the middle three. In fact, it reaches 100 percent for the largest group. This observation suggest problems for Milk Marketing, Inc. as dairy farms grow larger unless the causes are corrected.

Prices

The sampled farmers were asked to report their judgement as to a fair market price for milk in 1981. The average suggested price was $14.20 per hundredweight. The individual responses were distributed relatively symmetrically around the mean, except for a slight skewness to the high end.

TABLE 2: Membership in Milk Marketing, Inc. by Number of Cows, November, 1980.[a]

Number of Cows	Membership in Milk Marketing, Inc.[b] Current Member	Member at One Time	Never Member	Total
		(Percent)		
1-9	1.6	3.2	14.4	19.2
10-19	5.4	2.7	17.5	25.6
20-29	14.5	1.5	2.9	18.9
30-49	15.5	1.5	2.6	19.6
50-99	12.9	0.3	1.3	14.6
100-199	1.3	0.3	0.4	2.0
200+	0.1	0.1	0.0	0.2
TOTAL[c]	51.3	9.5	39.2	100.0

[a]Table excludes non-respondents to membership in Milk Marketing, Inc. question (two percent of the sample).

[b]Based on a weighted sample of 246 Ohio dairy farmers.

[c]Total does not add to 100 due to rounding error.

Source: Survey Data

This fair market price compares with an average October-November 1980 price of $13.90. Through June milk prices in Ohio had averaged $13.73 in 1981 or below the suggested fair price. Part of the explanation lies in the seasonal pattern of milk production and demand. However, it also appears that part of the discrepancy can be attributed to expectations of rising prices due to an increasing support price. This increase was postponed by legislation action. With the current Congressional debate over support prices undecided, it is difficult to determine what the new support will be. However, it is clear that the level of support in terms of percent of parity will decline to at least 75 percent, probably 70 percent, and maybe lower. This decline is being somewhat offset by an increasing parity price (from $18.90 in November 1980 to $20.20 in June 1981). It, therefore, seems likely that the level of the support price will remain fairly constant or decline slightly. Consequently, the expected fair market price is unlikely to be achieved in 1981.

What does this fact portend for future milk supplies. Probably a slow down in expansion of the cowherd. The constant milk price level has been accompanied by a steady level of feed prices and utility cow prices since November 1980. Despite an increase in hay prices, the overall figures indicate that the slow down can be expected to be moderate and not severe. In addition, given the stagnant demand, heavy government purchases can be expected to continue.

Policy to Support Prices

One response to the current debate over milk price supports is to abandon the parity based support system. To gauge dairy farmers' opinions of this possibility, a question concerning alternative policies was included in the questionnaire. Table 3 contains the results.

TABLE 3: Ohio Dairy Farmers' Opinions of Possible Government Policies on Milk Prices, November, 1980.

Policy	Percent[a]
Government buys milk products at a price based on the parity price.	24
Government buys milk products at a price based on the cost of production.	19
Government pays for culling dairy cattle at a price based on the parity price.	3
Government pays for culling dairy cattle at a price based on the cost of production.	6
No government program.	33
Other programs.	1
No Opinion.	11
No Response.	4
Total[b]	100

[a]Based on a weighted sample of 246 Ohio dairy farmers.

[b]Total does not add to 100 due to rounding error.

Source: Survey Data

Twenty-four percent of the respondents supported continuation of the present policy: government buying of milk products at a price based on parity. Nineteen percent supported a variation of the government purchase program. Instead of using parity, the intervention price would be based on the cost of producing milk. Thus, in terms of popularity, the cost of production concept nearly holds its own against the traditional parity concept.

Farmers were also asked about an entirely different approach to controlling supplies: payment for culling dairy cattle. Nine percent supported this concept. The majority of these respondents favored using cost of production instead of parity to determine the price at which culling payments would begin. In summary, this level of support was fairly impressive given the newness of the concept.

Finally, 33 percent of the respondents wanted no government program. As Table 4 reveals, most of this support came from the 1-9 and 10-19 cow herd operations. However, on a percentage basis, at least 20 percent of the operations in most cow size categories supported the free market concept. The highest percentage support came in the 10-19 category, with 1-9 and 200 plus categories next in line. It thus appears that the free market concept enjoys broad support.

The dairy farmers were also asked that if USDA is authorized to purchase milk products to support prices should a limit be placed on the amount purchased. Of those expressing an opinion, 34 percent wanted no limit placed on this activity; 9 percent wanted the limit placed at 10 percent of total milk output; 9 percent wanted the limit placed at 5 percent of total milk output; and 13 percent wanted the limit placed at 2 percent of total milk output (Table 5). To put these figures in perspective, CCC purchases were

TABLE 4: Ohio Dairy Farmers' Opinions of Possible Government Policies on Milk Prices by Number of Cows on the Farm, November, 1980.[a]

POLICY	NUMBER OF COWS							TOTAL[b]
	1-9	10-19	20-29	30-49	50-99	100-199	200+	
	(Percent)[c]							
Government buys milk products at a price based on the parity price.	1.6	2.7	4.4	7.8	7.2	0.7	0.1	24.5
Government buys milk products at a price based on the cost of production.	1.6	4.1	7.4	3.9	2.7	0.5	0.0	20.3
Government pays for culling dairy cattle at a price based on the parity price.	0.0	0.0	1.5	0.6	0.5	0.2	0.0	2.8
Government pays for culling dairy cattle at a price based on the cost of production.	1.6	0.0	1.5	1.2	1.5	0.1	0.0	5.9
No government program.	9.8	15.1	3.0	3.9	1.9	0.4	0.1	34.1
Other programs.	0.0	0.0	0.0	0.6	0.5	0.1	0.0	1.2
No opinion	4.9	4.1	1.5	0.6	0.2	0.0	0.0	11.2
TOTAL[b]	19.5	26.1	19.2	18.5	14.5	2.0	0.2	100.0

[a]Table excludes the non-respondents on the policy question (four percent of the sample).

[b]Total does not add to 100 due to rounding error.

[c]Based on a weighted sample of 246 Ohio dairy farmers.

Source: Survey Data

TABLE 5: Ohio Dairy Farmers' Opinions of the Percent of Total U.S. Milk Output at which Government Purchases to Support Dairy Prices Should be Stopped, November, 1980.[a]

Purchases as a Percent of Total Milk Output[a]	Percent of Respondents[b]
2	13
5	9
10	9
No Limit	34
No Opinion	26
No Response	9
TOTAL	100

[a]The opinion was based on the assumption that USDA is authorized to make purchases when prices decline below a certain price.

[b]Based on a weighted sample of 246 Ohio dairy farmers.

Source: Survey Data

approximately seven percent of total milk supply in 1980. Since this year was one of heavy purchases, it appears that only the two and five percent levels would represent effective curtailments of CCC purchasing authority. It can thus be concluded that dairy farmers are not in favor of any significant curtailment of CCC purchasing ability.

Other Issues: Imports, Cooperatives, and Marketing Orders

Two important features of the U.S. milk market are that almost all Grade A milk is marketed under federal marketing orders and through milk cooperatives. These two characteristics are independent although they are frequently used synonymously. Each could exist without the other.

Farmers were asked if the ability of milk cooperatives to bargain effectively should be increased. Sixty percent said yes; 13 percent said no; and 23 percent had no opinion. It is interesting to note that, while members of Milk Producers, Inc. were overwhelmingly in support of increasing bargaining effectiveness, even a majority of non-members who answered in the affirmative or negative supported increased cooperative bargaining power. Thus, it is clear that significant and broad support exists among dairy farmers for increasing the bargaining power of cooperatives.

Respondents were also asked if the marketing order system should be abandoned. Eleven percent answered yes; 51 percent answered no; and 32 percent had no opinion. Therefore, significant support exists for continuation of the federal marketing order system.

Lastly, the surveyed farmers were asked what action should be taken relative to imports of milk products. Less than one percent would support any increase in the present system which restricts imports to two percent of total U.S. milk equivalents. In fact, 36 percent wanted imports stopped altogether. The conclusion is obvious: no increase in imports.

Summary

A total of 540 Ohio dairy farmers were surveyed on current issues facing the dairy industry in mid-November 1980. The sample was stratified on number of cows in a herd. Useable questionnaires numbered 246. These returns were then expanded to population estimates.

Most Ohio dairy farmers earn the majority of their total family income from their dairy operations. In addition, 50 percent of the respondents were members of Milk Marketing, Inc. The non-members were concentrated in the small dairy farm size categories.

In the opinion of the respondents, the average fair market price for 1981 should be $14.20 per hundred-weight. It is unlikely that this price will be reached. The major reason is the postponement of support price increases. However, the constancy in feed prices and utility cow prices suggests that expansion will be slowed but not curtailed.

A return to the free market received the most support among policy alternatives. The majority of this support came from the smaller operations. Cost of production received about the same amount of support as parity as the method for determining the intervention price. Lastly, a new tool for controlling production, culling dairy cattle, was supported by nine percent of the respondents. This support is significant given the lack of attention paid to this concept.

Little support existed for placing a limit on the percent of total milk output the government could purchase, for increasing imports, or for abandoning the federal marketing order system. In contrast, significant support exists for increasing the bargaining ability of milk cooperatives.